- 18. Discuss three major categories of electronic warfare.
- 19. Compare and contrast artificial intelligence and human intelligence.
- 20. Explore the rules of punctuation marks with examples.

APRIL/MAY 2024

FPE20C/CPE20C-PROFESSIONAL ENGLISH FOR PHYSICAL SCIENCES

Time: Three hours

Maximum: 75 marks

PART A — $(10 \times 2 = 20 \text{ marks})$

Answer ALL questions.



Fill in the blanks choosing the correct forms of the verbs given within brackets

We put a slice of lemon into a cup of strong tea and the tea _____ (become) pale. We strike a match and a stick of wood____ (burst) into flame and ____ (turn) into charcoal. These ____ (be) all chemical reactions.

- 2. Match the following:
 - (a) Terrestrial (i) Freedom
 - (b) Liberated (ii) Death
 - (c) Combustion (iii) Land
 - (d) Asphyxiation (iv) Heat
- 3. Why do we consider Gauss the "Prince of Mathematicians"?
- Name a few fitness trackers that you are familiar with.

- 5. Write the synonyms for the following words: Optimal, Intrigue, Array, and Decipher.
- 6. What are the basic skills in ICT?
- 7. List a few insects that live in water.
- 8. What is buoyancy?
- 9. How is AI used in playing online music?
- 10. Write a note on Python.

PART B — $(5 \times 5 = 25 \text{ marks})$

Answer ALL questions.

11. (a) List a few chemical compounds that you use everyday.

Or

- (b) What motivated the professor to visit the nearby village?
- 12. (a) Explain the functions of fitness trackers.

Or

(b) How did Lavoisier devise a better form of gun powder?

13. (a) Enumerate digital competences for academic and professional life.

Or

- (b) Trace the importance of digital literacy.
- 14. (a) Distinguish between a QR code and a barcode.

Or

- (b) Explore the pros and cons of ultra violet ink.
- 15. (a) Elaborate on the similarities that exist between Python and the English language.

Or

(b) Prepare a format for writing the minutes of a meeting.

PART C — $(3 \times 10 = 30 \text{ marks})$.

Answer any THREE questions.

- Define the following terms: Clocking, Light year, Modem, Gravitational field, Tele conference.
- 17. Write an essay on the applications of AI in the fields of health, education, agriculture, and banking sectors.